

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 10-162842

(43)Date of publication of application : 19.06.1998

(51)Int.Cl.

H01M 8/02

H01M 8/04

H01M 8/10

(21)Application number : 08-320206

(71)Applicant : MATSUSHITA ELECTRIC WORKS LTD

(22)Date of filing : 29.11.1996

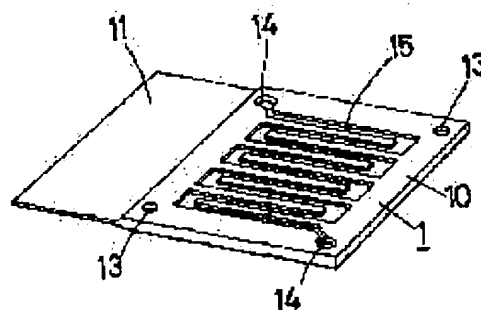
(72)Inventor : YAMAGA NORIYUKI
KUDO HITOSHI
SHINAGAWA MIKIO

(54) SEPARATOR FOR SOLID HIGH POLYMER FUEL CELL AND SOLID HIGH POLYMER FUEL CELL STACK USING THIS

(57)Abstract:

PROBLEM TO BE SOLVED: To excellently cool a fuel cell stack, and make the whole compact in the thickness of a device by projecting a heat radiating fin to a side edge part of a separator main body having a gas passage which contacts electrodes arranged on both sides by sandwiching a solid high polymer electrolyte film and supplies gas.

SOLUTION: A separator main body part 10 for a solid high polymer fuel cell is formed into a rectangular plate shape by a conductive material, and a groove-shaped gas passage 15 for hydrogen gas and oxygen gas is arranged in its both surface center part. Gas supply-discharge holes 13 and 14 for hydrogen gas and oxygen gas are respectively arranged in two places in diagonal line positions on the outer peripheral side, and the passage 15 is communicated with the hole 14. A heat radiating fin 11 plays a role to radiate heat of a separator main body part 10, and is formed by projecting from one side of an outer peripheral side edge part of the separator main body part 10, and the fin 11 is formed thinner than the separator main body part 10. A



separator 1 is composed of a metallic material, and is large in heat conductivity, and the heat in the main body part 10 is quickly transmitted to the fin 11, and cooling is improved.

LEGAL STATUS

[Date of request for examination] 10.05.2002

[Date of sending the examiner's decision of rejection] 16.03.2004

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]